

REMARKS

Claims 1 – 41 are pending in the application. Claims 1, 14, and 28 are currently amended.

Rejection 35 USC 112

Examiner rejected the claims on the grounds that separately controllable is not taught in the application as filed. Claims have been amended to teach separately addressable. Basis for the amendment is page 9 first paragraph, "individual pixels may be separately addressable".

Claim Rejections – 35 U.S.C 102

In this section of the official action, Claims 1-5, 13-14, and 16-20 were rejected under 35 U.S.C 102(b) as being anticipated by US Patent No. 6,549,179, to Youngquist.

The Examiner further rejected claims 28, 35, and 40 - 41 under 35 U.S.C 102(b) as being anticipated by US Patent No. 6,482,664, to Lee et al.

Favorable reconsideration of this rejection in view of the above amendments and the following explanations is respectfully requested.

The present application describes a thin and flexible display device which is suitable for use in smart cards and like technologies.

The present invention, introduces the idea of independently controllable pixels which include disassociated dots of light emitting diode (LED) material.

US Patent No. 6,549,179, to Youngquist, utilizes a discovery that one can use substantially less than 0.010 inch excess solder pad dimensions placed with conventional surface mounting machinery (with appropriate cautionary steps being

taken to prevent undesired solder flow through solder pad connection vias) to obtain relatively dense two-dimensional visual display of light-emitting diodes surface mounted on a printed circuit board.

With Youngquist, each diode provides a dot of output light when activated and the diodes can be disposed in relatively densely packed two-dimensional row and column arrays.

US Patent No. 6,482,664, to Lee et al, as described in the summary of invention section, provides a method for manufacturing white LEDs.

The method involves the steps of mixing a fluorescent dye with molding compound powder such as resin powder, compressing the mixture thereby producing a molding compound compact. The method also includes transfer-molding the molding compound compact on a blue LED chip, thereby being capable of forming a white LED serving to convert blue light emitted from the blue LED chip into white light. As a result, white light is omitted, while eliminating the potting process used in conventional cases, thereby allowing the white LED to have a slim structure suitable for back illumination for LCDs and other displays used in electronic products

Claim 1, as currently amended, defines a pixel-based electronic display comprising a plurality of *independently controllable* pixels, wherein the independently controllable pixels respectively comprise a plurality of *disassociated* dots of light emitting diode material.

As described hereinabove and defined by claim 1, the present invention teaches the novel and inventive idea of using *independently addressable* pixels, wherein the independently addressable pixels comprise a plurality of *disassociated* dots of light emitting diode material.

Youngquist describes densely arranging LEDs in two-dimensional row and column arrays, and controlling the LEDs together to present digits, letters, etc.

For example, Youngquist describes on column 4, line 44: " As can be seen in FIG. 2 (and in the enlargement of FIG. 3), the LEDs 20 of successive rows R1, R2, R3, R4, etc. are orthogonally disposed with respect to one another so as to define a pattern commonly referred to in the brick-laying art as a "herringbone" pattern. Similarly, it will be noted that successive columns C1, C2, C3 . . . are also made up of LEDs that are disposed orthogonally to one another in the herringbone pattern".

However, Youngquist falls short of disclosing, or even hinting at the idea of using *independently addressable* pixels, wherein the independently addressable pixels comprise a plurality of *disassociated* dots of light emitting diode material, as taught by the present invention, and defined by claim 1. Rather the dots and the pixels appear to be identical in the case of Youngquist.

It is thus respectfully believed that claim 1 is both novel and inventive over the prior art, and maintained that claim 1 is allowable.

Claim 14, as currently amended, defines a thin computing device comprising electronic processing functionality and a display screen, wherein the display screen is a pixel-based display screen comprising a plurality of *indepnedently addressable* pixels, wherein the pixels respectively comprise *a plurality of disassociated* dots of light emitting diode material.

As described hereinabove, neither Youngquist nor Lee describe or even hint at the idea of using *independently addressable* pixels, wherein the independently addressable pixels comprise a plurality of *disassociated* dots of light emitting diode material, as taught by the present invention, and defined by claim 14.

It is thus respectfully believed that claim 14 is both novel and inventive over the prior art, and maintained that claim 14 is allowable.

Claim 28, as currently amended, defines a method of manufacturing a flexible low power display comprising: providing *independently addressable* pixels, wherein the independently addressable pixels respectively comprise a plurality of *disassociated* dots of light emitting diode (LED) material, bonding the dots to a PCB having a backing material, and removing the backing.

As described hereinabove, Lee does not discuss addressing of pixels and does not distinguish between pixels and dots as separate entities. Lee does not describe or even hint at the idea of using *independently controllable* pixels, wherein the independently controllable pixels comprise a plurality of *disassociated* dots of light emitting diode material, as taught by the present invention, and defined by claim 28.

It is thus respectfully believed that claim 28 is both novel and inventive over the prior art, and maintained that claim 28 is allowable.

All dependent claims are believed to be allowable as being dependent upon an allowable main claim.

All of the matters raised by the Examiner have been dealt with and are believed to have been overcome.

In view of the foregoing, it is respectfully submitted that all the claims now pending in the application are allowable over the cited reference. An early Notice of Allowance is therefore respectfully requested.

Respectfully submitted,

A handwritten signature in cursive script, reading "Martin D. Moynihan".

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Encls:

Petition for Extension of Three (3) Months Time and
Request for Continued Examination (RCE)